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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,332	12/20/2001	John Boakes	367.40946X00	2546
22907 7590 05/30/2007 BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER LUEBKE, RENEE S	
			ART UNIT 2833	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/022,332

Applicant(s)

BOAKES & VAITKEVICIUS

Examiner

Renee S. Luebke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 16, 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claim 17 is objected to because "said electrical connector apparatus" on line 11 lacks antecedent basis. It is further noted that the claim was improperly copied from the previous version and that the colon should be reinserted after "comprises" on line 5.

3. Claims 1-31 and 33 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain new subject matter which was not described in the original specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In particular, although the specification (page 9, lines 26-29) describes a contact that is deformed and collapsed, it does not suggest "an inside surface of said contact . . . in substantially direct contact with the surface of said rigid substrate" as required by claims 1 and 17. Contrary to applicant's suggestion, there is no support for this operating feature on page 4, lines 15-17; these lines merely address the shape of the contact, which is dome shaped with a convex exterior. Further, contrary to applicant's statements, the claimed arrangement is also not fully supported at page 9, lines 26-27. First, the statement there concerning the domes being flattened "if sufficient force can be applied," lacks any indication of whether sufficient force can or should be supplied. This results in uncertainty as to whether this arrangement is even possible. Further, "almost completely flattened" is not the same scope as the claim limitation requiring "substantially direct contact with the surface." The specification, as originally filed, would not have suggested to any person skilled in the art to make these inventive leaps and assumptions, and to form the invention commensurate in scope with the claims.

Applicant is required to cancel the new matter in the reply to this Office Action.

4. Claims 7 and 23 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The requirement in claims 7 and 23 that the PCB be flexible is contradictory to the requirement of claims 1 and 17 (from which these claims respectively depend) that the substrate, which comprises the PCB, be rigid. Although the application discloses one embodiment (Fig. 4) having the contact on a flexible PCB substrate, the embodiment of claims 1 and 17 require the contact to be directly on a rigid substrate (Fig. 5).

Applicant suggests that the embodiment discussed at page 11, lines 8-9 teaches a rigid substrate with a flexible PCB. However, this mention appears to be to the embodiment with a flexible substrate. It is noted that member 310 is called a "flexible PCB" (page 7, line 27) and a "substrate" (page 8, line 2), and that member 310' is a "substrate . . . made of a more rigid material" (page 11, lines 6-7). In the paragraph on page 11, lines 4-9, there are two embodiments mentioned. First is the embodiment shown in Fig. 6a with a rigid substrate/PCB 310'. Second is the embodiment with a flexible PCB 310. There is no suggestion to combine a rigid and a flexible substrate/PCB.

There is no disclosure that would encompass the rigid substrate in direct contact with a contact of claims 1 and 17, and the flexible PCB of claims 7 and 23.

5. Claims 1, 2, 4, 6, 8, 9, 11, 17, 18, 20, 22, 24 and 27, absent the new matter discussed in paragraph 3 above, remain rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/41946 (which corresponds to the Chinese document cited by applicant). This device comprises a card 1, a reader with a

rigid substrate 10 and convex contacts 2 supported by the substrate. An area (suggested by reference numeral 4) between the contact and the substrate is empty and permits movement (as seen by comparing Figs. 5 and 6). Lacking further claim limitations, the position shown in Fig. 6 defines a “fully collapsed deformed state.”

Applicant argues that the present invention differs from WO 98/41946 because the present invention allows the contact “to bring” the connector closer to the substrate and “reduces the volume of the connector.” However, these alleged features/advantages are not found in the claims. First, the contacts of the present device are passive and do not act to “bring” the connector anywhere. Second, both the connector being “closer” and the volume being “reduced” are relative terms for which neither the claims, nor the arguments supply a point of reference. Such comparisons, therefore, cannot be seen to impart patentability in light of a reference that comprises the claimed structure. Third, claim 17 (but not claim 1) does require that the volume of the retained card/connector be less than the total of the card and connector separately; this is true of any connector (including that of WO 98/41946) where the card is inserted into a void in the connector. Applicant has not shown any claimed limitation that is not met by WO 98/41946.

Dependent claims 2, 4, 6, 8, 9, 11, 18, 20, 22, 24 and 27 remain rejected as previously discussed and not separately argued by applicant.

6. Claims 3 and 19 remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946 in view of the Research Disclosure cited by applicant, as previously discussed and not separately argued by applicant.

7. Claims 5, 10, 21 and 26 remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946, as previously discussed and not separately argued by applicant.

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8. Claims 12, 13, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946 in view of Reichardt as previously discussed and not separately argued by applicant.

9. Claims 14-16, 25, 30, 31 and 33 remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/41946 in view of applicant's admitted prior art shown in Figs. 1 and 2 of the present application, as previously discussed and not separately argued by applicant.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any response to this action may be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the

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Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mrs. Renee Luebke at (571) 272-2009. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mrs. Paula Bradley, can be reached at (571) 272-2800, extension 33.

A handwritten signature in black ink, appearing to read 'R. Luebke', with a stylized flourish at the end.

Renee S. Luebke
Primary Patent Examiner
May 17, 2007